



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,305	12/10/2004	Vincenzo Varriale	VARR300/JEK	8641
23364	7590	03/30/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			SPAHN, GAY	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/516,305		VARRIALE, VINCENZO	
	Examiner		Art Unit	
	Gay Ann Spahn		3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 31-63 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions - Election of Species Requirement

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The FIRST GROUP OF SPECIES (i.e., species of seal faces) from which Applicant must elect is:

Group I, Species I - Fig. 1a;

Group I, Species II - Fig. 1b;

Group I, Species III - Fig. 1c;

OR

Group I, Species IV - Fig. 9.

If Applicant elects any of Species I, II, or III from the FIRST GROUP OF SPECIES listed immediately above, then Applicant must also elect from the following group of Subspecies (i.e., species of cylindrical seal):

Subspecies I - Fig. 3 (1st embodiment of cylindrical seal);

OR

Subspecies II - Fig. 6 (2 embodiment of cylindrical seal).

The SECOND GROUP OF SPECIES (i.e., species of deformation step of obtaining corrugated profile) from which Applicant must elect is:

Group II, Species I - pot die forming;

OR

Group II, Species II - roll forming.

The THIRD GROUP OF SPECIES (i.e., species of step of obtaining channels) from which Applicant must elect is:

Group III, Species I - mechanical deformation;

Group III, Species II - laser technology;

Group III, Species III - chemical corrosion;

Group III, Species IV - deposition of material;

OR

Group III, Species V - application of spacers.

The FOURTH GROUP OF SPECIES (i.e., species of channel cross-sectional shape) from which Applicant must elect is:

Group IV, Species I - circular;

Group IV, Species II - rectangular;

OR

Group IV, Species III - triangular.

Applicant is required, in reply to this action, to elect a single species FROM EACH OF THE FOUR (4) GROUPS OF SPECIES (and from the one group of subspecies depending upon the election made with respect to the first group of species) to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species OF EACH OF THE FOUR (4) GROUPS OF SPECIES (and from the one group of subspecies, if appropriate depending upon the election made with respect to the first group of species), including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The FIRST GROUP OF SPECIES (i.e., species of seal faces)

Group I, Species I (Fig. 1a): claims 33-38, 49-52, and 58-60

Group I, Species II (Fig. 1b): claims 33-38, 49-52, and 58-60

Group I, Species III (Fig. 1c): claims 33-38, 49-52, and 58-60

Group I, Species IV (Fig. 9): claims 39-42 and 53-56

The SUBSPECIES (i.e., species of cylindrical seal) :

Subspecies I (Fig. 3): claims 35-38, 49-52, 58-60

Subspecies II (Fig. 6): claims 35-38, 49-52, 58-60

The SECOND GROUP OF SPECIES (i.e., species of obtaining corrugations)

Group II, Species I (pot die forming): claim 42

Group II, Species II (roll forming): claim 42

The THIRD GROUP OF SPECIES (i.e., species of obtaining channels)

Group III, Species I (mechanical deformation): claim 43

Group III, Species II (laser technology): claim 43

Group III, Species III (chemical corrosion): claim 43

Group III, Species IV (deposition of material): claim 43

Group III, Species V (application of spacers): claim 43

The FOURTH GROUP OF SPECIES (i.e., species of channel cross-section)

Group IV, Species I (circular): claim 44

Group IV, Species II (rectangular): claim 44

Group IV, Species III (triangular): claim 44

The following claims appear to be generic: 31, 32, 43-45, 46, 48, and 61-63.

Art Unit: 3673

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The FIRST GROUP OF SPECIES (i.e., species of seal faces)

Group I, Species I (Fig. 1a): rectangular sheet having parallel channels

Group I, Species II (Fig. 1b): rectangular sheet having serpentine channel

Group I, Species III (Fig. 1c): rectangular sheet having grid channels

Group I, Species IV (Fig. 9): disc-shaped sheet having radial channels

The SUBECIES (i.e., species of cylindrical seal)

Subspecies I (Fig. 3): cylindrical seal w/ inner & outer cylindrical bodies

Subspecies II (Fig. 6): cylindrical seal w/ inner, intermediate & outer cylindrical bodies

The SECOND GROUP OF SPECIES (i.e., species of obtaining corrugations)

Group III, Species I (pot die forming) and Species II (roll forming) are mutually exclusive deformation steps of obtaining corrugated profiles.

The THIRD GROUP OF SPECIES (i.e., species of obtaining channels)

Group IV, Species I (mechanical deformation), Species II (laser technology), Species III (chemical corrosion), Species IV (deposition of material), and Species V (application of spacers) are mutually exclusive steps of obtaining channels.

The FOURTH GROUP OF SPECIES (i.e., species of channel cross-section)

Group VI, Species I (circular), Species II (rectangular), and Species III (triangular) are mutually exclusive channel shapes.

A telephone call to request an oral election to the above restriction requirement and election of species requirements was not made due to the complexity of the election.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Conclusion

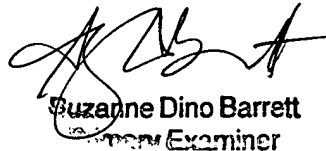
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Thursday, 8:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)-272-6660. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

^{GAS}
Gay Ann Spahn, Patent Examiner
March 28, 2006


Suzanne Dino Barrett
Patent Examiner